IN THE CLAIMS

Please amend claims 2-4. As required by Rule 121 that took effect March 1, 2001, all of the claims, claims 2-19, as amended, are reproduced hereinbelow in clean form:

2. An assembly of simultaneously transmitted electromagnetic signals within a spread spectrum system, said signals being related to each other in said assembly so as to communicate stored information to a receiver, said signals being generated by modulating selected subsets of a set of stored binary spreading-code sequences corresponding to nodes in a multi-node communication network onto a sinusoidal electromagnetic carrier, at least one subset of said set of binary spreading-code sequences containing more than one of said binary spreading-code sequences, each subset of said set of binary spreading-code sequences embodying a corresponding portion of said information.

3. An assembly of simultaneously transmitted electromagnetic signals within a spread spectrum system, said signals being related to each other in said assembly so as to communicate stored information within a transmitting node to a receiving node in a multi-node communication network, said assembly of signals being produced by a process of:

a) assigning blocks of bits embodying said stored information to corresponding subsets of a set of

stored binary spreading-code sequences corresponding to nodes in said multi-node communication network, at least one of said subsets of said set of binary spreading-code sequences containing more than one of said binary spreading-code sequences; and

b) simultaneously transmitting selected subsets of said set of stored binary spreading-code sequences from said transmitting node to said receiving node.

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4. An assembly of electromagnetic signals within a spread spectrum system, said signals being related to each other in said assembly so as to communicate stored information within a transmitting node to a particular receiving node of a multi-node communication network, said assembly of signals being produced by a process of:

a) generating a set of stored binary spreading-code sequences by combining a first group of stored data with a second group of stored data, said set of stored binary spreading-code sequences containing more than one binary spreading-code sequence;

b) assigning blocks of bits embodying said stored information to corresponding subsets of said set of stored binary spreading-code sequences, each of said subsets of said set of binary spreading-code sequences containing at least one of said stored binary spreading-code sequences; and

c) transmitting selected subsets of said set of binary spreading-code sequences from said transmitting node to said receiving node.

5. The assembly of signals of claim 2 wherein said set of stored binary spreading-code sequences comprises combined contents of specified stages of a first binary shift register and a second binary shift register.

6. The assembly of signals of claim 2 wherein said set of stored binary spreading-code sequences comprises combined contents of specified stages stored within at least one random access memory module.

7. The assembly of signals of claim 2 wherein each of said selected subsets of said set of stored binary spreading-code sequences comprises two binary spreading-code sequences.

8. The assembly of signals of claim 7 wherein the two binary sequences comprising each of said selected subsets are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, and by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, said first and second carrier signals having the same frequency but being out of phase with each other.

8. The assembly of signals of claim 1 wherein each of said selected subsets of said set of stored binary spreading-code sequences comprises three binary spreading-code sequences.

9. The assembly of signals of claim 8 wherein the three stored binary sequences comprising each of said selected subsets are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, and by modulating a third binary sequence onto a third sinusoidal electromagnetic carrier signal, said first, second and third carrier signals having the same frequency but being out of phase with each other.

10. The assembly of signals of claim 1 wherein each of said selected subsets of said set of stored binary spreading-code sequences comprises four binary spreading-code sequences.

11. The assembly of signals of claim 10 wherein the four stored binary sequences comprising each of said selected subsets are transmitted simultaneously by modulating a first binary sequence onto a first sinusoidal electromagnetic carrier signal, by modulating a second binary sequence onto a second sinusoidal electromagnetic carrier signal, by modulating a third binary sequence onto a third sinusoidal electromagnetic carrier signal, and by modulating a fourth binary sequence onto a fourth sinusoidal electromagnetic carrier signal, said first, second,

third, and fourth carrier signals having the same frequency but being out of phase with each other.

13. The assembly of signals of claim 2 wherein said stored binary spreading-code sequences are generated by combining contents of specified stages of a first binary shift register with contents of specified stages of a second binary shift register.

14. The assembly of signals of claim 2 wherein said stored binary spreading-code sequences are generated by combining contents of specified stages within a random access memory module.

15. The assembly of signals of claim 3 wherein all of said blocks of bits embodying said stored information are of equal fixed length.

16. The assembly of signals of claim 3 wherein, when at least one subset of said set of stored binary spreading-code sequences comprises more than one sequence:

a) each of said subsets of said set of stored binary sequences received at said particular receiving node is correlated with each binary sequence of said set of binary sequences so as to produce a set of correlation outputs, each correlation output corresponding to a specified one of said binary sequences, and

b) said set of correlation outputs is evaluated to identify a particular one of said subsets of said set of binary sequences as being most likely to have been transmitted from said transmitting node to said particular receiving node.

17. The assembly of signals of claim 16 wherein each of said selected subsets of said set of stored binary spreading-code sequences comprises two binary spreading-code sequences.

18. The assembly of signals of claim 16 wherein each of said selected subsets of said set of stored binary spreading-code sequences comprises three binary spreading-code sequences.

19. The assembly of signals of claim 16 wherein each of said selected subsets of said set of stored binary spreading-code sequences comprises four binary spreading-code sequences.